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Analysis of the Size of the Joint Duty Assignment List

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Title IV of the Department of Defense Reorganization Act of 1986 (also known as the Goldwater-Nichols Act) requires officers to serve in a billet on the Joint Duty Assignment List (JDAL) before being promoted to flag rank. This research memorandum examines whether this requirement can be executed for all naval officers promoted to flag. The size of the JDAL and average tour length are used to calculate the average number of officers per cohort who can be expected to achieve this requirement in each officer community. Various modifications in the requirement are also explored to determine their effect on the percentage of officers likely to achieve the requirement. Keywords

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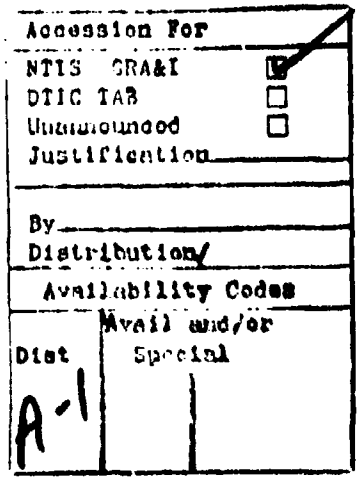

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ABSTRACT

Title IV of the Department of Defense Reorganization Act of 1986 (also known as the Goldwater-Nichols Act) requires officers to serve in a billet on the Joint Duty Assignment List (JDAL) before being promoted to flag rank. This research memorandum examines whether this requirement can be executed for all naval officers promoted to flag. The size of the JDAL and average tour length are used to calculate the average number of officers per cohort who can be expected to achieve this requirement in each officer community. Various modifications in the requirement are also explored to determine their effect on the percentage of officers likely to achieve the requirement.

EXECUTIVE SUMMARY

INTRODUCTION

Title IV of the Department of Defense Reorganization Act of 1986 (also known as the Goldwater-Nichols Act) requires officers to serve in a billet on the Joint Duty Assignment List (JDAL) for three and a half years before being promoted to flag rank. The JDAL is a list of billets with the Joint Chiefs of Staff, Department of Defense, Unified Commands, and elsewhere that involve interaction among the armed services. The purpose of this requirement for joint duty credit (JDC) is to foster cooperation among the services by ensuring that senior military leaders have knowledge of and experience in dealing with other services. Amendments to the act in 1988 changed the tour length requirement to three years and allowed for waivers to critical occupational specialists (COS) after two years in a JDAL billet. The law also gives the Secretary of Defense authority to grant "good of the service" waivers from this requirement, but a waived officer must serve in a joint billet during his first tour as a flag.

As originally envisioned, the JDAL was expected to include about 5,000 to 6,000 billets, but it has grown beyond expectations to its current level of over 8,300 billets. In a recent report on professional military education from the House Armed Services Committee (HASC) (also known as the Skelton Panel report), the committee recommended that the JDAL be reduced in size.[1] This recommendation motivated the analysis in this research memorandum.[2] The panel's desire to reduce the size of the JDAL focuses narrowly on the intention of the drafters of the Goldwater-Nichols Act to have a list including positions in only a small number of key joint activities. The growth in the JDAL, however, cannot be viewed in isolation but must be considered within the broader context of the entire Goldwater-Nichols

1. Committee on Armed Services, *Report of the Panel on Military Education of the One Hundredth Congress*, One Hundredth Congress First Session, April 21, 1989, p. 22.

2. Much of the material that follows originally appeared in appendix E of the *Navy Study Group Report on the Skelton Panel on Military Education*, October 1989. This memorandum contains some new material and does not necessarily reflect the views of the Navy Study Group.

Act. The driving force behind this growth is the JDC requirement for promotion to flag. The Navy's goal is that all officers in the zone for promotion to flag will have JDC. If the JDAL is reduced in size, fewer officers are able to get JDC. This would either reduce selectivity or force the Navy to seek more waivers from the JDC requirement.

The purpose of this research memorandum is to examine the relationship between the size of the JDAL and the percentage of flag-eligible officers likely to earn JDC. Other factors, such as the number of COS waivers and critical billets, are also considered. The goal of the analysis is to identify problems the Navy might have in executing the JDC requirement.

METHODOLOGY

The methodology for determining the expected percentage of officers with JDC is broken down into six steps:

1. Determine the *allocation of billets* in a community by rank.
2. Subtract the *number of critical billets* to determine the number of billets to be filled by officers without previous joint experience. Because critical billets must be filled by Joint Specialty Officers (JSOs), they are filled by officers who already have JDC.
3. Calculate the *average tour length* at each rank.
4. Calculate the *average fills per year* at each rank.
5. Apply *promotion* rates to determine the number of O-4s and O-5s with JDC who are expected to get promoted to O-6.
6. Divide the total number of O-6s with JDC (which includes those who earned it as O-4s and O-5s) by the number of O 6s desired in the average year group with joint experience to determine the *percentage of officers with JDC* relative to the goal of 100 percent.

RESULTS

Table I shows the percentage of officers in the zone for promotion to flag who are expected to have JDC. If officers are selected at random (i.e., no preselection of officers who will be promoted to flag), only about 60 percent are expected to have JDC in the steady state. Although most communities have an insufficient billet base to meet the 100-percent goal, in two communities, Special Warfare and Intelligence, the billet base exceeds the requirement and some officers will actually serve in more than one JDAL billet.

Table I. Flag promotion cohort and percentage with JDC relative to the goal by designator

Designator	Promotion cohort	Percentage with JDC
General URL	32	53
Surface Warfare	103	72
Submarine Warfare	50	51
Special Warfare	6	100
Special Operations	-	-[a]
Aviation	169	63
Cryptology	12	72
Intelligence	18	100
Public Affairs	11	58
Supply	52	59

a. No flags in FY 1989.

Three strategies are considered for increasing the percentage of officers with JDC. These strategies include increasing the number of COS waivers, increasing the size of the JDAL, and increasing the promotion rate of officers with JDC. The analysis of these strategies is limited to their impact on the large COS communities (i.e., surface, submarine, and aviation). The main conclusions of this analysis are:

- Permitting waivers for all COS officers would ensure that all surface warfare captains have JDC but would not increase opportunities by

enough to ensure either all submarine or all aviation captains would get JDC.

- The JDAL would have to be increased by 40 percent for surface warfare, over 90 percent for submarine warfare, and 55 percent for aviation to ensure that all flag-eligible officers have JDC.
- Significant increases in promotion rates, which implies preselection of lieutenant commanders for promotion to captain, would be required in surface and aviation communities to ensure complete JDC coverage. Even 100 percent promotion rates to commander and captain would be insufficient in the submarine community.

CONCLUSIONS

The Skelton Panel's recommendation to reduce the size of the JDAL conflicts with the Navy's need to ensure that all flag-eligible officers have JDC. Under current law, the size of the JDAL is too small to support the JDC requirement. Three choices remain: the Navy could seek waivers for a significant number of flag selectees each year, the Navy could be forced to select flag officers based on their joint experience instead of their operational proficiency, or changes could be made to the rules about JDC, the size of the JDAL, or other collateral provisions of the Goldwater-Nichols Act.

CONTENTS

TABLES

INTRODUCTION

Title IV of the Department of Defense Reorganization Act of 1986 (also known as the Goldwater-Nichols Act) requires officers to serve in a billet on the Joint Duty Assignment List (JDAL) for three and a half years before being promoted to flag rank. The JDAL is a list of billets with the Joint Chiefs of Staff, Department of Defense, Unified Commands, and elsewhere that involve interaction among the armed services. The purpose of this requirement for joint duty credit (JDC) is to foster cooperation among the services by ensuring that senior military leaders have knowledge of and experience in dealing with other services. Amendments to the act in 1988 changed the tour length requirement to three years and allowed for waivers to critical occupational specialists (COS) after two years in a JDAL billet. The law also gives the Secretary of Defense authority to grant "good of the service" waivers from this requirement, but a waived officer must serve in a joint billet during his first tour as a flag.

Originally, the JDAL was expected to include about 5,000 to 6,000 billets, but it has grown beyond expectations to its current level of over 8,300 billets. In a recent report on professional military education from the House Armed Services Committee (HASC) (also known as the Skelton Panel report), the committee recommended that the JDAL be reduced in size.[1] This recommendation motivated the analysis in this research memorandum.[2] The panel's desire to reduce the size of the JDAL focuses narrowly on the intention of the drafters of the Goldwater-Nichols Act to have a list including positions in only a small number of key joint activities. The growth in the JDAL, however, cannot be viewed in isolation but must be considered within the broader context of the entire Goldwater-Nichols Act. The driving force behind this growth is the JDC requirement for promotion to flag. The Navy, for example, wants as much flexibility as possible in selecting

1. Committee on Armed Services, *Report of the Panel on Military Education of the One Hundredth Congress*, One Hundredth Congress First Session, April 21, 1989, p. 22.
2. Much of the material that follows originally appeared in appendix E of the *Navy Study Group Report on the Skelton Panel on Military Education*, October 1989. This memorandum contains some new material and does not necessarily reflect the views of the Navy Study Group.

its flag officers. Ideally, 100 percent of all captains in the zone for promotion to flag would have JDC. If the number of JDAL bilets is reduced, the percentage of officers entering the zone for promotion to flag will also be reduced. This would either reduce selectivity for promotion to flag or force the Navy to seek more "good of the service" waivers.

The JDAL includes billets designated for the ranks of O-4 to O-6.[1] Traditionally, the Navy has placed relatively more emphasis than the Army and Air Force on operational assignments versus joint duty assignments, as reflected by the relatively small number of JDAL billets for naval officers. Naval officers represent 23 percent of the military officers across the Department of Defense, but they represent only 20 percent of the billets on the JDAL. Table 1 shows the distribution of JDAL billets by service and rank.

Table 1. JDAL billets by service and rank

Service	O-4	O-5	O-6	Total	Percentage
Army	1,071	1,358	617	3,046	36.6
Navy	548	732	386	1,666	20.0
Air Force	1,141	1,391	636	3,168	38.1
Marine Corps	173	201	71	445	5.3
Total	2,933	3,682	1,710	8,325	100.0

Another innovation of the Goldwater-Nichols Act is the establishment of a new specialty for military officers known as the Joint Specialist Officer (JSO). To become a JSO, an officer must fill a JDAL billet and attend one of the joint schools for professional military education. A JSO designation is required to fill certain key positions known as "critical billets." On the JDAL, a minimum of 1,000 billets are required to be critical. The number of critical billets is relevant for this analysis because they are filled by officers who already have JDC and therefore reduce the number of billets

1. Throughout this research memorandum, the rank level and name are used interchangeably. An O-4 is a lieutenant commander (LCDR), an O-5 is a commander (CDR), and an O-6 is a captain (CAPT).

available for this purpose. The Navy is currently filling 171 critical billets.

The purpose of this research memorandum is to examine the relationship between the size of the JDAL and the percentage of flag-eligible officers likely to earn JDC. Other factors, such as the number of COS waivers and critical billets, are also considered. The goal of the analysis is to identify the Navy's potential problems in executing the JDC requirement.

EXPECTED PERCENTAGE WITH JDC

The expected percentage of officers with JDC must account for two factors, opportunity and survivability. Opportunity is the number of billets available to be filled by each cohort of officers (i.e., year group). JDAL billets are filled by officers in the ranks O-4 to O-6, and each cohort is assumed to have the same opportunity. Total opportunity is limited to the number of billets that can be filled annually in each rank. The annual fills are determined by dividing the total number of billets by the tour length. For example, if 100 billets for O-4s are on the JDAL, and these billets are filled for an average of 2.5 years, an average of 40 officers in each cohort have the opportunity to earn JDC as O-4s. Survivability means that, in addition to having JDC, an officer must also be promoted to O-6 to be eligible for flag rank. In the example above, the actual number of officers entering the zone for flag who earned JDC as O-4s will probably be less than 40 because not all of them will get promoted to O-6. The Goldwater-Nichols Act establishes a minimum level of survivability with its provision mandating that the promotion rate among officers filling JDAL billets must at least equal the Navy-wide promotion rate. In the remainder of this section, the Navy-wide promotion rate is used to establish the minimum expected percentage of officers earning JDC. Using the Navy-wide promotion rate implies that officers are selected at random to fill JDAL billets. A subsequent section considers the effects and implications of relaxing this assumption.

METHODOLOGY

The methodology for determining the expected percentage of officers with JDC is broken down into six steps:

1. Determine the *allocation of billets* in a community by rank.
2. Subtract the *number of critical billets* to determine the number of billets to be filled by officers without previous joint experience. Because critical billets must be filled by JSOs, they are filled by officers who already have JDC.

3. Calculate the *average tour length* at each rank.

4. Calculate the *average fills per year* at each rank.

5. Apply *promotion* rates to determine the number of O-4s and O-5s with JDC who are expected to get promoted to O-6.

6. Divide the total number of O-6s with JDC (which includes those who earned it as O-4s and O-5s) by the number of O-6s desired in the average year group with joint experience to determine the *percentage of officers with JDC* relative to the goal of 100 percent.

The number of billets and waivers used in the remainder of this analysis reflect August 1989 levels. Because of the need for flexibility in the detailing process, the allocation of billets and waivers across the services and across communities varies over time. Consequently, the allocation faced by any particular cohort of officers could be somewhat different from that depicited in this analysis. The results, therefore, should be considered illustrative of the general problem as opposed to providing a definitive prediction for a particular community. Each of the remaining subsections discusses one of the steps of this methodology.

ALLOCATION OF JDAL BILLETS

Officers earn JDC by serving in a billet on the JDAL. Table 2 shows the distribution of the JDAL billets by billet designator and rank. In most cases, the billet designator specifies the designator of the officer that must fill the billet. The exceptions are the 1000 and 1050 billets. A 1000 billet may be filled by any officer, and a 1050 billet may be filled by any officer with a warfare specialty (e.g., surface or submarine warfare). The 1000 and 1050 billets are allocated to a community based on the size of the community.

Table 2. Navy JDAL billets by billet designator and rank

Billet designator	O-4	O-5	O-6
Any Officer (1000)	166	277	157
Any Warfare Specialty (1050)	59	75	45
Surface Warfare (1110)	46	72	18
Submarine Warfare (1120)	15	23	10
Special Warfare (1130)	7	17	6
Special Operations (1140)	3	1	0
Material Professional (12xx)	0	0	5
Aviation (13xx)	58	109	45
Engineering Duty (14xx)	7	2	0
Aeronautical Eng. Duty (15xx)	0	2	2
Cryptology (1610)	14	20	12
Intelligence (1630)	88	46	28
Public Affairs (1650)	7	9	8
Special Duty (18xx)	5	4	6
Supply Corps (3100)	62	65	40
Civil Engineers Corps (51xx)	11	10	4
Total	548	732	386

The remainder of the analysis focuses only on those communities that are affected by the recommendations of the Skelton Panel's report. The excluded communities are 12xx, 14xx, 15xx, 18xx, and 51xx.

Table 3 shows the distribution of JDAL billets by the designator and rank at which the billet is filled. The numbers in this table include the billets shown in table 2 for each community plus that community's allocation of 1000/1050 billets. These data are used in calculating the percentage of flag-eligible officers expected to get JDC.

Table 3. Navy JDAL-billet fills by designator and rank

Billet designator	O-4	O-5	O-6
General URL (1100)	63	43	7
Surface Warfare (1110)	97	191	93
Submarine Warfare (1120)	32	42	32
Special Warfare (1130)	9	21	9
Special Operations (1140)	4	1	0
Aviation (13xx)	143	266	141
Cryptology (1610)	14	23	15
Intelligence (1630)	90	47	28
Public Affairs (1650)	8	9	12
Supply Corps (3100)	62	65	40

Most of the 1000/1050 billets are allocated to three communities: general URL, surface, and aviation. The surface and aviation communities are the largest. As its name suggests, the General URL community is composed of generalists for which these are the only billets available. The allocation to the general URL community declines sharply with rank. At the O-6 level, over 80 percent of all of these generalist billets go to surface and aviation.

The submarine community, which is the other large URL community, gets only a relatively small percentage of the 1000/1050 billets. Although the submarine community is smaller than either surface or aviation and therefore would be expected to get a smaller share of the generalist billets, the small share to submarine is also a consequence of the exemption from the JDC requirement for nuclear-trained officers. Under current law, nuclear-trained officers do not require JDC for promotion to flag until FY 1994. Because of this waiver, only a small percentage of submarine officers would require JDC for promotion to flag. The remainder of this analysis does not consider this waiver because, under the current law, the current crop of lieutenant commanders will not be exempt once they reach the zone for promotion to flag. If the exemption actually expires in FY 1994, it is likely that the submarine community will garner a greater share of the 1000/1050 billets on the JDAL.

ALLOCATION OF CRITICAL BILLETS

In the Goldwater-Nichols Act, a minimum of 1,000 billets must be designated "critical." Because critical billets must be filled by JSOs (i.e., officers who already have JDC), these billets cannot be used to give an officer JDC. As the number of critical billets increases, the opportunity for other officers to earn JDC decreases. For example, if a community has 100 JDAL billets and 10 critical billets, 90 of these billets can be filled by officers without previous JDC; however, if the number of critical billets is increased to 20, only 80 can be filled by those without previous JDC. Within the context of the JDC requirement, critical billets restrict opportunities. Table 4 shows the current distribution of these billets by designator and rank. Because they require fully qualified JSOs, they are almost never filled by lieutenant commanders.

Table 4. Critical billets by designator and rank

Designator	O-5	O-6
General URL	5	1
Surface Warfare	16	22
Submarine Warfare	5	5
Special Operations	1	2
Special Warfare	0	0
Aviation	26	32
Cryptology	2	6
Intelligence	10	17
Public Affairs	0	1
Supply	6	5

Critical billets are not necessarily allocated proportionately across communities. Because of the requirements for integrated intelligence activities, a disproportionate number of the critical billets are for intelligence officers.

AVERAGE TOUR LENGTH

The opportunity to serve in a JDAL billet also depends on the tour length. As the tour length decreases, the number of officers with a JDAL opportunity increases. The prescribed tour length for JDAL billets is three years, but officers in the critical occupational specialty (COS) communities may get a waiver after serving for two years. The law limits COS waivers to 12.5 percent of the billets.[1] The COS communities include designators 111x, 112x, 113x, 114x, and 13xx. Table 5 shows the distribution of these waivers by designator and rank. All but ten of the waivers are allocated by community and rank. The ten held in reserve are meant to provide for management flexibility.

Table 5. COS waivers by designator and rank

Designator	O-4	O-5	O-6
Surface Warfare	32	34	15
Submarine Warfare	7	4	10
Special Warfare	2	3	–
Aviation	55	32	20
In Reserve	–	5	5
Total	96	80	40

The number of COS waivers is used to determine the average tour length in each community. For example, if commanders (O-5s) in a community fill 100 JDAL billets and 34 receive COS waivers, the average tour length is 2.66 years [(34*2+66*3)/100].

Because the numbers of billets and COS waivers vary by community and rank, the average tour length also varies. In the non-COS communities, the

1. The exact number of COS waivers allocated to each service is calculated by the staffs of the Office of the Secretary of Defense and the Joint Chiefs of Staff and distributed to each service on 1 October each year. The 12.5 percent applies to the total JDAL. The allocation to each service may be greater than or less than the 12.5 percent of the billets filled by that service. In practice, the amount of variation is relatively small.

average tour length is three years. In the COS communities, the average tour length depends on the proportion of billets with COS waivers at each rank. Table 6 shows the average tour length in the COS communities by rank.

Table 6. Average tour length for JDAL billets in COS communities by rank

Designator	O-4	O-5	O-6
Surface Warfare	2.7	2.8	2.8
Submarine Warfare	2.8	2.9	2.6
Special Warfare	2.8	2.9	3.0
Aviation	2.6	2.9	2.8

The averages shown in table 6 use the allocation of COS waivers shown in table 4. The ten waivers that have been held in reserve are not allocated among the communities. The effect of including these waivers is small. For example, allocating all of these reserve waivers to either the surface or the aviation communities decreases the average tour length by less than 0.1 year. If they are spread evenly over all the COS communities, the effects would be even smaller.

FILLS PER YEAR

The fills per year determines the average number of officers in each cohort at each rank who can earn JDC from a given number of JDAL billets. Fills per year is calculated by dividing the total billets by the average tour length. If the average tour length is 3 years and the total billets is 100, the average fills per year would be 33.3 (100/3). If the average tour length is decreased to 2.5 years, the average fills per year would increase to 40 (100/2.5). Table 7 shows the average fills per year by rank and designator. Because of the COS waivers, the COS communities can put more officers through the same number of billets than the non-COS communities.

Table 7. Average fills per year by designator and rank

Designator	O-4	O-5	O-6
General URL	21.0	12.7	2.0
Surface Warfare	36.3	62.4	25.5
Submarine Warfare	11.5	12.8	10.3
Special Warfare	3.2	7.0	2.3
Special Operations	1.3	.3	.0
Aviation	54.7	83.7	38.7
Cryptology	4.0	7.0	3.0
Intelligence	30.0	12.3	3.7
Public Affairs	2.7	3.0	3.7
Supply Corps	20.7	19.7	11.7

The table shows, for example, that in the aviation community about 55 lieutenant commanders, 84 commanders, and 39 captains in each cohort can serve in JDAL billets. Not all of the officers serve at the same time. The whole process is spread over a 15-year period.

PROMOTION

If officers are chosen to fill JDAL billets at random, not all of the lieutenant commanders and commanders earning JDC are likely to be promoted to captain. Consequently, summing the annual fills across the rows in table 7 overestimates the number of captains in the promotion zone for flag with JDC. If the Navy would preselect lieutenant commanders and commanders for promotion to captain and also limit JDAL assignments only to those selectees, summing across the columns in table 7 would provide reasonable estimates of JDC total. There are, however, several problems with preselection. First, performance in command is a major factor in determining promotion to captain (and to flag). Very few lieutenant commanders get command experience, and those who do (e.g., lieutenant commander commands in the surface community) are too senior to serve in a JDAL billet as a lieutenant commander. To a lesser extent, the same problem exists with preselection of commanders. Second, with preselection, the promotion decision is shifted from the selection boards to the detailers. Third,

although the Goldwater-Nichols Act mandates that the promotion rate for those serving in a JDAL billet be comparable to that for the entire Navy, it does not require that all officers with JDC get promoted.

Given these factors, it is reasonable to assume that officers with JDC are randomly selected from a community and will have promotion rates to commander and captain equal to the promotion rates for the entire community. In most communities, the promotion rate to commander is 70 percent and to captain is 55 percent. In the submarine community, the rates are 80 and 70 percent, respectively. Table 8 shows the number of lieutenant commanders and commanders with JDC in each community who can be expected to be promoted to captain.

Table 8. Annual number of lieutenant commanders and commanders with JDC subsequently promoted to captain

Designator	O-4	O-5	Total
General URL	8.1	7.0	15.1
Surface Warfare	14.0	34.3	48.3
Submarine Warfare	6.4	9.0	15.4
Special Warfare	1.2	3.9	5.1
Special Operations	.5	.2	.7
Aviation	21.1	46.0	67.1
Cryptology	1.8	3.9	5.7
Intelligence	11.6	6.8	18.4
Public Affairs	1.0	1.7	2.7
Supply	8.0	10.8	18.7

COHORT SIZE AND JDC PERCENTAGE

The promoted officers shown in table 8 are combined with the annual captain fills shown in the final column of table 7 to determine the total number of JDC captains entering the zone for promotion to flag. This sum is divided by the size of the cohort entering the zone to determine the percentage of captains in the promotion zone with JDC relative to the 100-percent goal. These data are shown in table 9.

Table 9. Flag promotion cohort and officers with JDC as a percentage of goal by designator

Designator	Promotion cohort	Percentage with JDC
General URL	32	53
Surface Warfare	103	72
Submarine Warfare	50	51
Special Warfare	6	100
Special Operations	–	–[a]
Aviation	169	63
Cryptology	12	72
Intelligence	18	100
Public Affairs	11	58
Supply	52	59

a. No flags in FY 1989.

With the exception of the special warfare and intelligence communities, the current JDAL cannot support the requirement that all officers promoted to flag have JDC. Both communities with a sufficient billet base to meet the requirement are small, so a redistribution of billets away from these communities would not substantially affect the results. For example, the intelligence community's percentage could be reduced to 100 by eliminating the ten noncritical captain billets, but increasing the number of captain billets by ten in any of the COS communities is insufficient to meet the goal of 100 percent.

ALTERNATIVE APPROACHES FOR MEETING THE JDC REQUIREMENT

This section explores various policy changes that might enable the Navy to ensure that all eligibles meet the JDC requirement. These alternatives include increasing the number of COS waivers, increasing the number of billets, and increasing the promotion rate.

Because most of the flag officers in the Navy come from the surface warfare, submarine warfare, and aviation communities, the discussion that follows is limited to these three communities. According to table 7, only about five of eight captains in these communities can earn JDC under existing circumstances.

INCREASE COS WAIVERS

One possible approach for increasing the JDC percentage is to raise the throughput by increasing the number of COS waivers. The advantage of this approach is that it increases access to JDC while increasing the opportunity for operational experience for officers with JDC. Table 10 shows the JDC percentage in three cases: doubling the waivers, tripling the waivers, and allowing for waivers in all noncritical billets (i.e., reducing average tour length to two years). In some cases, when the waivers are tripled, the number of waivers exceeds the number of noncritical billets. In these cases, waivers are increased only to the number of these billets.

Table 10. Effect of increasing COS waivers on the JDC percentage in the large COS communities

Designator	Double waivers	Triple waivers	All waivers
Surface Warfare	78	86	99
Submarine Warfare	57	65	71
Aviation	68	75	88

Increasing the number of COS is a partial but not a total solution. Providing waivers for all noncritical COS billets eliminates the problem in

the surface warfare community and much of the problem in the aviation community but still leaves a sizable gap in the submarine community. A large part of the problem in the submarine community is the relatively small number of billets, which may be a result of the exemption that nuclear submariners have from the JDC requirement until FY 1994. If the exemption is eliminated after FY 1994, some billets may be redistributed to the submarine community. Such a redistribution would increase the JDC percentage in the submarine community but would necessarily reduce the percentage in some other community.

INCREASE JDAL BILLETS

Another alternative is to increase the share of the JDAL billets given to these communities. Such an increase would broaden the base from which JDC can be earned. Implementing such a shift and at the same time finding meaningful billets for these COS officers probably implies permitting the use of in-service billets, such as Sixth and Seventh Fleet and Military Sealift Command staffs. Table 11 shows the impact of a proportional increase in the JDAL at all paygrades of 25 and 50 percent.

Table 11. JDC percentage relative to goal with increases in JDAL billets in the large COS communities

	Increase in JDAL	
Community	25 percent	50 percent
Surface Warfare	91	110
Submarine Warfare	65	78
Aviation	79	96

Only in the surface warfare community is an increase in the JDAL by 50 percent sufficient to ensure that all eligible officers have JDC. An increase in the size of the aviation JDAL of 55 percent and of the submarine JDAL of over 90 percent is required to get the JDC percentage up to 100 in each community.

INCREASE PROMOTIONS OF JDC OFFICERS

Increasing either the number of COS waivers or the number of JDAL billets is outside the direct control of the Navy. An alternative strategy for increasing the number of officers with JDC in the zone for flag is increasing the promotion rate of lieutenant commanders and commanders with JDC above the all-Navy averages. Increasing the promotion rate implies a certain amount of preselection because officers with JDC would have a higher chance of promotion than those without it. To minimize the amount of required preselection, the Navy could try to raise the promotion rate to captain as much as possible before elevating the promotion rate to commanders. Table 12 summarizes the required changes in promotion rates in the large COS communities. In the surface and aviation communities, the current promotion rates are 70 percent to commander and 55 percent to captain; in the submarine community, the current promotion rates are 80 percent to commander and 70 percent to captain.

Table 12. Changes in promotion rates required to ensure 100 percent JDC in the large COS communities

	Promotion rate	
Community	To commander	To captain
Surface	unchanged	90
Submarine	100	100[a]
Aviation	85	100

a. Produces only 70 percent JDC.

The surface community requires an increase in the promotion rate for captains from 55 percent to 90 percent. In the submarine community, even a 100-percent promotion rate to both commander and captain is insufficient to ensure that all flag-eligible officers have JDC. In the aviation community, the promotion rate to captain must be increased from 55 percent to 100 percent, and the promotion rate to commander must be increased from 70 percent to 85 percent.

EVALUATING THE JDC GOAL OF 100 PERCENT

The analysis in this research memorandum is based on the assumption that the Navy's goal should be that all officers reaching the zone for flag should have JDC. Some critics have argued that this assumption is surely incorrect because not all captains really have a chance to get promoted. In the COS communities, for example, an officer who has not had a major command has virtually no chance of promotion to flag. Given this fact, the argument proceeds that the Navy need only ensure that something less than 100 percent of its captains get JDC. For example, perhaps the goal should be that all major command screeners would have JDC. Although there is surely some validity to this argument, it has almost no impact on the final conclusion of the analysis.

In the surface warfare community, for example, the screening rate for major command is approximately 55 percent. This implies that only about 57 of the 103 SWO captains really need to get JDC. The question, however, is which 57. SWOs do not screen for major command until after they are already captains. Without preselecting major command screeners, on average, only about 55 percent of the the lieutenant commanders and commanders who eventually get promoted to captain with JDC will also screen for major command–that is, approximately 48 SWOs (see table 8) will promote to captain with JDC, but only 26 of these officers will screen for major command. An additional 26 SWOs (see table 7) get JDC while they are captains. Perhaps with careful detailing a disproportionate number of those who screen can be given JDC. Of course, this implies that detailers can forecast the decisions of the screening board. In this case, senior commanders who are likely to screen could be identified and given JDAL billets in their first assignment as captains. For example, if 70 percent of the captains assigned to JDAL billets screen for major command instead of the community-wide average of 55 percent, the overall percentage of major command screeners with JDC would be about 82 percent instead of the 72 percent stated previously. Even if detailers could identify major command screeners with 100 percent accuracy, not all major command screeners in the SWO community would meet the JDC requirement under current conditions.

The argument that smart detailing would enable the Navy to relax its 100-percent goal has one major problem. Smart detailing is a double-edged sword. Success (in the form of promotion) in the Navy results from both performance and opportunity. Some jobs are not as career enhancing as others. This is true of fleet billets as well as JDAL billets. Also, not all of the billets on the JDAL provide the type of experience that officers should get before promotion to flag. If it is true that not all captains really need JDC, it is also true that not all JDAL billets are worth filling with potential flag candidates. That is, if smart detailing could reduce the number of officers that really need JDC to make flag, smart detailing also could reduce the number of JDAL billets that should be filled by officers with flag potential. The original drafters of the Goldwater-Nichols legislation estimated the JDAL at 5,000 to 6,000 billets compared with the current size of 8,300. If the original estimates captured all of the truly challenging billets, the remaining billets, about 30 percent of the total, would be of relatively poor quality. Presumably with smart detailing, officers identified as having flag potential would not be sent to such billets. Reducing the size of the JDAL available to flag-potential officers would sharply limit the opportunity to get JDC. Consequently, smart detailing practices must be viewed as having an ambiguous effect on the results of this analysis.

Another problem with this model is that it does not consider career timing. Successful officers in some communities, particularly aviation, must successfully complete a long series of assignments between their commander command tours and selection for major command. A carrier aviator may serve as an executive officer on a carrier, the deputy commander of an air wing, and the commander of an air wing before selection for major command. Once selected for major command, he may have a sequential command before being promoted to flag. There may not be enough years available to fit in all of these assignments plus a joint assignment before becoming eligible for promotion to flag. Thus, assuming that captains without prior JDC who screen for major command will get assigned to JDAL billets at the same rate as their nonscreening contemporaries may overestimate the actual rate for these officers. This implies that the actual JDC percentage may be lower than that stated in table 9.

CONCLUSIONS

The Goldwater-Nichols Act requires that all officers promoted to flag have JDC–that is, the officer must have served in a billet on the JDAL. The law provides for "good of the service" waivers from the Secretary of Defense from this requirement, but those officers who are waived must serve in a joint billet as their first flag assignment.

Under the current conditions (i.e., tour length rules and the size of the JDAL), the Navy cannot expect to execute this requirement. In the steady state, only about 60 percent of officers entering the zone for promotion to flag are expected to have JDC. This implies that, out of approximately 30 URL flag promotions per year, the Navy will require 12 waivers. This number of waivers is probably higher than anticipated by the drafters of the legislation and could cause concern in Congress. Furthermore, if those officers with waivers are required to fill flag-level JDAL billets in their first flag tour, approximately one-half of joint flag billets will be filled by officers without previous joint experience.

The analysis has also explored various strategies for increasing the percentage of officers with JDC. These strategies include reducing average tour length by increasing the number of COS waivers, increasing the size of the JDAL, and increasing the promotion rate of lieutenant commanders and commanders with JDC. All of these strategies would increase the JDC percentage and reduce the required number of waivers. However, each of these changes would involve either a change in the law or major change in the Navy's approach to officer advancement. Only a significant expansion of the JDAL would ensure that all officers would have JDC in the promotion zone to flag. Such an expansion would cause a change in the type of billets included on the JDC and would probably require the inclusion of some in-service billets, such as Sixth- and Seventh-Fleet staffs and the Military Sealift Command. These additions would require changes in legislation.

The Skelton Panel's recommendation to reduce the size of the JDAL conflicts with the Navy's need to ensure that all flag-eligible officers have

JDC. Under current law, the size of the JDAL is too small to support the JDC requirement. Three choices remain: the Navy could seek waivers for a significant number of flag selectees, the Navy could be forced to select flag officers based on their joint experience instead of their operational proficiency, or changes could be made to the JDC requirement, the size of the JDAL, or other collateral provisions of the Goldwater-Nichols Act.